

IN THE CLAIMS

The following claims are the claims pending in this Application, and replace all prior claims in this Application.

Claim 1. (currently amended) A platen for improving performance in chemical mechanical polishing (CMP) applications, comprising:

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a plurality of piezoelectric elements disposed in the platen, ~~wherein~~ the plurality of piezoelectric elements is being configured to exert ~~capable of exerting~~ force on an underside of a polishing belt.

Claim 2. (original) A platen as recited in claim 1, wherein an electric field is used to activate the piezoelectric elements.

Claim 3. (original) A platen as recited in claim 1, wherein the plurality of piezoelectric elements comprises piezoelectric elements of varying dimensions.

Claim 4. (original) A platen as recited in claim 3, wherein piezoelectric elements near an edge of the platen are smaller than piezoelectric elements near the center of the platen.

Claim 5. (original) A platen as recited in claim 1, wherein each piezoelectric element of the plurality of piezoelectric elements can be individually activated to exert force against the polishing belt.

Claim 6. (original) A platen as recited in claim 5, wherein each piezoelectric element of the plurality of piezoelectric elements can be individually activated to adjust force resistance against the polishing belt.

Claim 7. (original) A platen as recited in claim 1, wherein a sacrificial material disposed above the platen is used to reduce wear on the platen.

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Claim 8. (currently amended) A system for improving performance in chemical mechanical polishing (CMP) applications, comprising:

a wafer head capable of carrying a wafer;

a polishing belt disposed below the wafer head; and

a platen having piezoelectric elements disposed therein, the platen being positioned below the polishing belt, ~~wherein~~ the piezoelectric elements are being configured to exert ~~capable of exerting~~ force on an underside of the polishing belt.

Claim 9. (original) A system as recited in claim 8, wherein an electric field is used to activate the piezoelectric elements.

Claim 10. (original) A system as recited in claim 8, wherein the piezoelectric elements are of varying dimensions.

Claim 11. (original) A system as recited in claim 10, wherein piezoelectric elements near an edge of the platen are smaller than piezoelectric elements near the center of the platen.

Claim 12. (currently amended) A system as recited in claim 8, wherein each piezoelectric element is configured to ~~can~~ be individually activated to exert force against the underside of the polishing belt.

Claim 13. (currently amended) A system as recited in claim 12, wherein each piezoelectric element is configured to ~~can~~ be individually activated to adjust force resistance against the underside of the polishing belt.

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Claim 14. (currently amended) A system as recited in claim 8, wherein the force exerted against the underside of the polishing belt is transferred to the wafer to provide zonal control during a CMP process.

Claim 15. (previously amended) A system as recited in claim 8, further comprising a sacrificial material disposed above the platen, the sacrificial material being used to reduce wear on the platen.

Claim 16. (original) A system as recited in claim 15, wherein the sacrificial material is slowly rolled across the platen during a CMP process.

Claim 17. (currently amended) A method for improving performance in chemical mechanical polishing (CMP) applications, comprising the operations of:

providing a platen having piezoelectric elements disposed therein, the platen being positioned below a polishing belt, ~~wherein~~ the piezoelectric elements ~~are~~ being configured to exert capable of exerting force on an underside of the polishing belt;

applying a wafer to the polishing belt; and

stabilizing the polishing belt utilizing the platen by causing, ~~wherein~~ the piezoelectric elements to apply specific forces to the underside of the polishing belt.


Claim 18. (original) A method as recited in claim 17, further advancing a sacrificial material across the platen.

Claim 19. (original) A method as recited in claim 17, wherein the piezoelectric elements are of varying dimensions.

Claim 20. (original) A method as recited in claim 19, wherein piezoelectric elements near an edge of the platen are smaller than piezoelectric elements near the center of the platen.

Claim 21. (currently amended) A platen for improving performance in chemical mechanical polishing (CMP) applications, comprising:

a plurality of piezoelectric elements disposed in the platen, ~~wherein~~ the plurality of piezoelectric elements being configured to exert ~~is capable of exerting~~ force on an underside of a polishing belt,

 ~~wherein~~ each piezoelectric element of the plurality of piezoelectric elements being configured to ~~can~~ be individually activated to exert the force against the underside of the polishing belt, and ~~wherein~~ each piezoelectric element of the plurality of piezoelectric elements being configured to ~~can~~ be individually activated to adjust force resistance against the underside of the polishing belt.

Claim 22. (original) A platen as recited in claim 21, wherein the plurality of piezoelectric elements comprises piezoelectric elements of varying dimensions.

Claim 23. (original) A platen as recited in claim 22, wherein piezoelectric elements near an edge of the platen are smaller than piezoelectric elements near the center of the platen.

Claim 24. (currently amended) A system for improving performance in chemical mechanical polishing (CMP) applications, comprising:

a wafer head capable of carrying a wafer;

a polishing belt disposed below the wafer head; ~~and~~

C1 a platen having piezoelectric elements disposed therein, the platen being positioned below the polishing belt, ~~wherein~~ the piezoelectric elements being configured to exert ~~are capable of exerting force~~ on an underside of the polishing belt, ~~wherein~~ each piezoelectric element being configured to ~~can~~ be individually activated to exert force against the underside of the polishing belt, and ~~wherein~~ each piezoelectric element being configured to ~~can~~ be individually activated to adjust force resistance against the underside of the polishing belt; and

a sacrificial material disposed above the platen, the sacrificial material being used to reduce wear on the platen, wherein the sacrificial material is slowly rolled across the platen during a CMP process.

Claim 25. (original) A system as recited in claim 24, wherein the piezoelectric elements are of varying dimensions.

Claim 26. (original) A system as recited in claim 25, wherein piezoelectric elements near an edge of the platen are smaller than piezoelectric elements near the center of the platen.

Claim 27. (currently amended) A method for improving performance in chemical mechanical polishing (CMP) applications, comprising the operations of:

providing a platen having piezoelectric elements of varying dimensions disposed therein, the platen being positioned below a polishing belt, ~~wherein~~ the piezoelectric elements being configured to exert ~~are capable of exerting~~ force on an underside of the polishing belt;

applying a wafer to the polishing belt;

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stabilizing the polishing belt utilizing the platen by causing, ~~wherein~~ the piezoelectric elements to apply specific forces to the underside of the polishing belt; and

advancing a sacrificial material across the platen.

Claim 28. (original) A method as recited in claim 27, wherein piezoelectric elements near an edge of the platen are smaller than piezoelectric elements near the center of the platen.
